3, HIV, STD Integrated System (THISIS)

TB, HIV, STD Integrated System (THISIS)

Texas Department of State Health Services TB/HIV/STD/Viral Hepatitis Unit

The Problem

Tuberculosis, HIV, and STD public health programs use information systems to track and attempt to control the spread of disease. Those systems store disease and case management data from the first positive test to follow up doctor's visits and information on other people who may have been exposed. This data helps public health programs identify and notify those who may have been exposed, track the epidemics, plan resource allocation, and design interventions.

In Texas, the Department of State Health Services and local and regional health jurisdictions track and report disease information in a variety of methods:

- TB paper records are created and hand-entered into a local data system before they are re-entered into a central system (Tuberculosis Program Area Module [TB-PAM])
- HIV cases are documented on paper and then hand-entered to a central system (eHARS)
- Other STDs are reported into an outdated application known as Sexually Transmitted Disease Management Information System (STD*MIS)

These methods are prone to error, slow, and are becoming harder to fix or change as they age. They also provide less protection of private health information and do not provide for quick identification of patients infected with more than one disease who often require specialized treatment. These methods grew around the needs of the time and the technology available, but their limitations now hinder an effective public health response.

The Solution

In 2009, DSHS began investigating what an improved and integrated reportable disease and case management system might look like. After reviewing business practices and requirements, DSHS selected a web-based system by Consilience (Xerox) Software called MAVEN. MAVEN was chosen because it proved to be able to:

- Integrate the reporting and tracking processes for TB, HIV and STD to a single interface that will be accessible by local and regional health jurisdictions and select providers.
- Enable real-time reporting and management of diseases, removing communication barriers between DSHS and reporting agencies as well as between different disease areas.
- Deploy a modern system that will shrink the size of the overall system and allow for continuous system improvements as technological and institutional changes happen.

MAVEN is already being used by other DSHS programs such as the Healthcare Associated Infections, Birth Defects, Blood Lead, and Trauma registries, providing a proven platform that has broad support throughout the agency. The TB/HIV/STD version of MAVEN is called TB, HIV, STD Integrated System, or **THISIS**.

THISIS will be accessible from anywhere with a secure internet connection. With a single source of information for all three disease areas, patients will not have to provide information for every visit. A patient's record can be updated with demographic changes by staff from the three disease areas without having to create a whole new record.

THISIS will minimize paper records with the important benefit of securing personal health information in a single encrypted electronic system. THISIS will also eliminate the need to transfer paper records between reporting agencies and DSHS. THISIS will be fully auditable and will ensure personal health information is protected with the most appropriate security measures possible.

The implementation of THISIS will require fewer servers and enable a standard surveillance process, ensuring both training and performance is effective and efficient. In the future, THISIS will also allow access through tablets, eliminating the need for paper in the field. Most importantly, THISIS will deliver more timely, complete, and accurate data, allowing for a more effective public health response to TB, HIV, and STD infection.

THISIS Rollout

THISIS will be deployed in four releases with different systems addressed each time. Every release will be fully tested and will have a pilot and stabilization phase that will ensure that everything works as expected before deploying across the state.

Once THISIS has been rolled out statewide, DSHS will decommission the following systems:

- STD*MIS
- Tuberculosis Program Area Module (TB-PAM)
- Tuberculosis Information Management System (TIMS)
- Tuberculosis Case Registry (TCR)
- Tuberculosis Tracker
- TB Contact Investigation Database
- Jail/Corrections Latent TB Infection (LTBI) Suspect Cases

Data from these systems will have been imported into THISIS before rollout. TB-PAM and TIMS will have backup files stored.

Enhanced HIV/AIDS Reporting System (eHARS) is the application used to collect and manage HIV data required by the CDC to monitor an epidemic. This system will remain and continue to be the official reporting system for HIV case information. However, THISIS and eHARS will be automatically synchronized, allowing day-to-day work to be done in THISIS. DSHS will only use eHARS for reporting to the CDC.

Statewide rollout of THISIS is scheduled to be complete by the end of 2016.

FACTS TO SHARE

The DSHS TB/HIV/ STD/Viral Hep Unit receives about 182,000 new reports regarding patients per year.

There are currently
221 reporting
entities across
the state creating
24,310 channels of
communication.

There are more than **80,000** people living with HIV in Texas.

To learn more about THISIS, please call 512-533-3000 or e-mail hivstd@dshs.state.tx.us



DSHS TB/HIV/STD/Viral Hep Unit PO Box 149347 MC 1873 Austin, Texas 78714-9347 www.dshs.state.tx.us/thsvh/ Contact your local health department to learn more about TB, HIV, and STDs Publication No. E13-14727 (Rev. 1/16)